

MOROZOVA, YE. I.

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/2 PG - 573
 AUTHOR MOROZOVA E.P.
 TITLE On the stability of the rotation of a solid body which is
 suspended on a string.
 PERIODICAL Priklad.Mat.Mech. 20, 621-626 (1956)
 reviewed 2/1957

Let a homogeneous symmetric solid body of revolution with mass M be suspended on the string OO_1 of length l . The upper end of the string O is in a vertical bearing. In the point O_1 which lies on the symmetry axis the body is firmly connected with the string. The point G is the mass center. The usual simplifying assumptions are made for the string. In order to investigate the stability of the trivial solution of the established equations of motion the author applies the direct Liapunov method. The Liapunov function is constructed according to a method of Cetajev as a linear combination of three integrals of the set up system of equations of motion. The theorem of energy, the theorem of conservation of areas and $r = \text{const.}$ are applied. After a certain expense of calculation (there occurs a quadratic form of eight variables!) the author obtains the following results: a) if O_1 lies higher than G or coincides with G , then the constants of the mentioned linear combinations of integrals can always be chosen such that the conditions of stability are satisfied for every angular velocity. Therefore the stationary rotation around the symmetry axis is always

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stable. b) If G lies higher than O_1 , then the conditions of stability are fulfilled only if the polynomial

$$y(n) = A n^4 - C \omega l n^3 - g \left[A - M a (1-n) \right] n^2 + C \omega g n - M g^2 a$$

possesses four real roots. Here we have: ω - angular velocity of the rotating body, a - the distance from G to O_1 , l - length OO_1 , A, B and C - central principal moments of inertia of the solid body.

As a special case the conditions of stability for a body with a fixed point in the Lagrange case are obtained for $l = 0$.

INSTITUTION: *M*ita.

RAZUVAYEV, G.A.; ETLIS, V.S.; MOROZOVA, Ye.P.

Isomerization of some substituted olefin oxides induced by
hydroxyl radicals. Zhur. org. khim. 1 no.9:1567-1570 S '65.
(MIRA 18:12)

1. Submitted July 15, 1964.

L 6933-66 ENT(m)/EPF(c)/ENP(j)/T RM

ACCESSION NR: AR5003008

8/0081/64/000/020/8034/8034

SOURCE: Ref. zh. Khimiy. Abs. 208186

25
B

AUTHOR: Bobinova, L. M.; Morozova, Ye. P.

TITLE: A study of the polymerisation of ethylene oxide in the presence of some metal sulfates

CITED SOURCE: Tr. po khimii i khim. tekhnol. Gor'kiy, vyp. 2(8), 1963, 296-299

TOPIC TAGS: ethylene oxide polymer, sulfate catalyst, polymerization catalyst, calcium sulfate, triethylaluminum, gas phase, polymerization

TRANSLATION: When ethylene oxide was polymerized under the influence of Ca, Zn, Na, Mn and Al sulfates, a macromolecular polymer was obtained with the aid of $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ (although no polymer was obtained on CaSO_4). The reaction could be carried out either in ampoules or at atmospheric pressure, passing the gaseous ethylene oxide through at a rate of 15 g/hr. Experiments showed that the maximum yield (75-80%) was achieved when the amount of $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ was 3-5% of the weight of ethylene oxide; increasing the temperature (from 70 to 120°C) reduced

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the reaction time (from 70 to 30 hrs) without decreasing the molecular weight (30,000-40,000 as determined viscosimetrically). During polymerization in the gas phase, the maximum yield of polymer was obtained at 180-200C for 50 hrs. (an induction period of 12-15 hrs., $\eta \sim 0.2$). The use of $Al(C_2H_5)_3$ or $Al(iso-OC_2H_5)_3$ as a cocatalyst (0.5-3.0%) together with $CaSO_4 \cdot 2H_2O$ (2-5%) increased the molecular weight of the polymer to 60,000 (determined viscosimetrically). The yield was 62-97% (reaction temperature 120C for 30 hrs.). The polymers obtained are hard powders which are soluble in water and benzene. Yu. Sazanov.

SUB CODE: MT, OC

ENCL: 00

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Card 2/2

MOROZOVA, Ye.S.

Effect of addition alloys on the structure and properties of patented
and cold-drawn carbon steel wire. Sbor. trud. TSHIICEM no.17:441-471
'60. (MIRA 13:10)

(Steel--Metallurgy)

(Wire drawing)

SHUL'MAN, E.A.; SHATROV, I.I.; BRONSHTEYN, N.I.; LISINA, S.P.; MOROZOVA,
Ye.S.; GORBUNOVA, T.S.

Immunological reactions following typhus fever. Zhur.mikrobiol.
epid.i immun. no.5:63-68 My '55. (MLRA 8:7)

1. Iz Moskovskogo gorodskogo instituta epidemiologii i bakterio-
logii (rukovoditel' -prof. M.M.Mayevskiy).
(TYPHUS, immunology,
immun. reactions after)

USSR / Microbiology - Microbes Pathogenic to Humans and Animals F-4

Abs Jour: Referat. Zh. Biol., No. 1, 1958, 743

Author : Kovalevskaya, I.L., Morozova, E.S.

Title : Experimental Study of New Techniques in Preparing Alcoholic Vaccines Against Intestinal Infections. Communication 1. The Study of Alcoholic Vaccines from Flexner and Sonne Broth Cultures.

Orig Pub: Materialy po obmenu opytom. G. upr. in-tov vaktsin i syvorotok M-va zdravookhr. SSSR, 1956, 2/52, 131-144

Abstract: No abstract.

Card 1/1

ALIKHANYAN, S.I.; MOROZOVA, Ye.S.; VESELOVA, S.I.

Comparative study of the variability in antibiotic synthesis of various strains of Act. streptomycini under the influence of ultraviolet rays and ethyleneimine. Antibiotiki 6 no.12:1055-1058 D '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
(ACTINOMYCES) (ULTRAVIOLET RAYS...PHYSIOLOGICAL EFFECT)
(ETHYLENIMINE)

KOVALEVSKAYA, I.L.; MOROZOVA, Ye.S.

Dry vaccines from the microbes of dysentery, typhoid fever and
paratyphoid B. Trudy IEMG no.7:110-121'60. (MIRA 16:8)
(VACCINES) (SALMONELLA) (SHIGELLA)

MOROSOVA, Ye.S., M. KHANIN, et al.

Natural and induced variation of the response of the immune system to production of antituberculous vaccination. *Immunology*, no. 4, 1990, 75-79. (English).

1. Vsesoyuznyy nauchno issledovatel'skiy tsentr tuberkuleza, Moskva.

ROZENGART, M.I.; MORTIKOV, Ye.S.; KAZANSKIY, B.A., akademik

Dehydrocyclization of n-heptadiene and n-heptatriene on an
alumochromopotassium catalyst. Dokl. AN SSSR 166 no. 10, 19-
122 Ja '66. (1966 19:1)

1. Institut organicheskoy khimii AN SSSR. Submitted October 21,
1965.

GORODENOV, V.D.; ADEL', I.B.; ZHIGACH, K.F. [deceased]; MOROZOVA, Ye.V.

Effect of variable temperatures on the swelling of clay material.
Burenie no.8:17-19 '64. (MIRA 18:5)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni instituta nefte-
khimicheskoy i gazovoy promyshlennosti im. akad. Gubkina.

KAZAKOVA, I.I.; GORODNOV, V.D.; MOROZOVA, Ye.V.

Effect of chemical reagents on the amount of centrifugate in
clay muds. Izv. vys. ucheb. zav.; neft' i gaz 7 no.10:24-27 '64.
(MIRA 18:2)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti
imeni akademika I.M. Gubkina.

GORODNOV, V.D.; ADEL', I.B.; ZHIGACH, K.F.; MOROZOVA, Ye.V.

Effect of external pressure on the swelling of clay rocks in
solutions of chemical reagents. Neft.khoz. 42 no.4:14-18 Ap '64.
(MIRA 17:2)

MOROZOVA, Ye.V.

Clinical aspects and treatment of subarachnoid hemorrhages of
syphilitic etiology. Trudy Inst.krev.pat. AN Kazakh.SSR 1:101-109
'52.

(BRAIN--HEMORRHAGE)

(SYPHILIS)

(MLRA 10:2)

MOROZOVA, Ye.V.; PESKOVA, A.V.

Method of simultaneous determination of pentosans and uronic acids in plant fibers. Bum.prom. 30 no.4: 10-12 Ap '55. (MLBA 8:c)

1. Laboratoriya khimii drevesiny Tsentral'nogo nauchno issledovatel'skogo lesokhimicheskogo instituta.
(Cellulose) (Pentosans) (Uronic acids)

9(2)

AUTHOR: Morozova, Yu.A., Engineer

SOV/143-58-10-2/24

TITLE: A Method of Calculating the Rotor Current During
Transient Processes in Synchronous Generators Taking
into Account the Exciter

PERIODICAL: Izvestiye vysshikh uchebnykh zavedeniy, Energetika,
1958, Nr 10, pp 9-16 (USSR)

ABSTRACT: Transient processes in synchronous generators are
usually calculated under the assumption that the
voltage at the exciter is kept constant or changes
under the influence of excitation forcing according to
the exponential law. Actually, the rotor current changes
during transient processes in the generator create
additional voltage changes at the exciter, caused by
active resistances of the armature circuit and by
transient processes in the exciter. In case of a long
transient process (starting of synchronous motors,
voltage recovery after disconnecting a short circuit,
etc), the calculation of the rotor current without
considering the voltage changes at the exciter may

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SOV/143-58-10-2/24

A Method of Calculating the Rotor Current During Transient Processes in Synchronous Generators Taking into Account the Exciter

lead to essential errors. The influence of exciters on transient processes in synchronous generators has been considered in available literature. However, the method of calculating transient processes in generators with consideration of exciters has not yet been completed in theory and additional experimental confirmation is required. Especially the method explained in the paper of L.Z. Shenkman [Ref 5] must not be used for generators with damper windings. The author of this paper developed a calculation method for the rotor currents under consideration of the exciter saturation during transient processes in generators having damper windings. He tested the calculation method experimentally. A dc shunt wound generator with additional poles and with a realy excitation impulse device was used as an exciter. This excitation system found the most wide-spread application in the USSR. The investigation of this excitation system is of special interest, since free currents in the rotor

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during transient processes cause the greatest voltage changes in exciters with self-excitation. The investigation consists of the combined solution of Gorev-Park differential equation systems and differential equations of the transient processes in the exciter. The following assumptions were made for simplifying the aforementioned equations: a) absence of active stator resistance; b) unchanged rotation speed; c) disregarding the aperiodic stator current component; d) equality of the parameters x_{ad} between each winding pair; e) absence of inductive reactance of the exciter armature; f) shorting the free rotor currents as a whole in the armature circuit. The author then presents differential equations describing the transient process in an exciter. The influence of the exciter on the transient process is demonstrated by graphs of the rotor current change during short circuits at the generator terminals. The graphs were

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plotted by numerical integrating with consideration of the exciter with a) absence of voltage control, shown in figure 1, b) relay impulse excitation, shown by figure 2, c) compounding, also shown in figure 1. The calculations were performed for a generator with the following parameters: $P = 3,400$ kv-amps, $\cos \phi = 0.7$, $v_n = 6.3$ kv. Figure 3 shows an oscillogram of the rotor current and voltage changes at the exciter when connecting a resistance into the armature circuit of the exciter. The experiment was conducted on a 3,400 kv-amps generator. The oscillogram shows a magnetic polarity reversal of the exciter. The exciter voltage changed its sign within 0.38 seconds and the rotor current within 2.8 seconds. The calculation of a sudden short circuit showed (Figure 1) that the exciter voltage changed its sign within 0.3 seconds and the rotor current approximately within 2 seconds. The method presented in this article may be used for calculating the rotor current during im-

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pulse excitation of a generator and during the voltage recovery after disconnecting a short circuit. Figure 4 shows oscillograms of voltage and rotor current changes at the exciter during voltage recovery after switching off the nominal current of a 3,400 kv-amps generator. Graph $I_f = f(t)$ shows points obtained by calculation. In this case the calculation resulted in a good coincidence with the experimental data. All calculations and experiments were performed under the condition that the exciter brushes were set to neutral. There is a practical interest in establishing the influence of a brush shift from neutral on the behaviour of the exciter during a transient process. The author considered in this paper a dc generator with self-excitation as an exciter, having only additional poles. The influence of other exciter types must be investigated in the future, especially exciters with compensating and compound windings. Transient processes in the exciters themselves have

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not yet been sufficiently investigated. For the future theoretical and experimental analyses are required for the dependence of the exciter armature response on the armature circuit current at a given saturation and also in dependence of the saturation. There are 5 graphs and 5 Soviet references.

ASSOCIATION: Moskovskiy energeticheskiy institute (Moscow Institute of Power Engineering) Kafedra elektricheskikh stantsiy (Chair of Electric Power Plants)

SUBMITTED: June 5, 1958

Card 6/6

MORGZOVA, Yu. A., Cand Tech Sci -- (diss) "Transition processes in synchronous generators taking into account characteristics of machine exciters." Moscow, 1960. 16 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Lenin Power Inst); 250 copies; price not given; (KL, 24-60, 133)

MOROZOVA, Yu.A., inzh.

Calculating the self-excitation of the exciters in synchronous
generators. Izv.vys.ucheb.zav.; energ. 3 no.3:6-14
Mr '60. (MIRA 13:3)

1. Moskovskiy ordena Lenina energeticheskiy institut.
Predstavlena kafedroy elektricheskikh stantsiy.
(Electric generators)

MOROZOVA, Yu A.; NAMIKONYANTS, L.G., doktor tekhn. nauk, red.

[Methodology for calculating transient processes in synchronous generators taking into account the characteristics of the machine exciters] Metodika rascheta perekhodnykh protsessov v sinkhronnykh generatorakh s uchetom kharakteristik mashinnykh vozbuditelei. Moskva, Energ. in-t, 1963. 42 p. (MIRA 18:1)

BASKAKOV, V.S.; VIKHLYAYEV, V.M.; GAVRILOV, R.I.; GREBNEV, P.A.; ZHEMCHUZHENI-KOVA, Ye.Ye.; IDEL'SON, I.D.; MEN'SHIKOV, N.S.; MOROZOVA, Yu.G.; POPOV, V.A.; FEDOROV, S.F.; PAVLOV, Ya.M., dotsent, kandidat tekhnicheskikh nauk, redaktor; ZHIGLINSKIY, A.A., inzhener, redaktor; RUNICH, K.N., inzhener, redaktor; SOKOLOVA, L.V., tekhnicheskiy redaktor

[A collection of drawings for parts used in machine building] Sbornik mashinostroitel'nykh chertezhei dlia detalirovok. Izd. 2-oe, dop. i perer. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 1 v., 50 l. (MIRA 10:2)
(Machinery--Design)

М. А. 20.6.44, 10.11.

KUOUSHEV, I.D.; MOROZOVA, Yu.G.

Water filtration through a layer of paper stock. *Bum. prom.* 32 no.5:
11-12 *Ky* '57. (MLRA 10:6)

1. Leningradskiy politekhnicheskiy institut im. M.I. Kalinina.
(Papermaking machinery) (Filters and filtration)

MOROZOVA, Yu.G.

Filtration of pulp on circular paper machines. Bum.prom.32
no.9:24 S '57. (MIRA 10:12)

1. Leningradskiy politekhnicheskii institut im.M.I.Kalinina.
(Paper industry)

MOROZOVA, Yu.G.

Investigating the operation of the cylinder paper machine. Trudy
LPI no.191:278-297 '57. (MIRA 11:9)
(Papermaking machinery)

MOROZOVA, Yu G-

COMMUNIST / Chemical Technology, Chemical Products
CHINA and Their Application, Part 4. - Cellulose and Its Derivatives, Paper. H

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 63136.

Author : Yu. G. Morozova.

Inst : Not given.

Title : Upon The Pulp Filtration on Circular-Screen Paper Machines.

Orig Pub: Tszaochzhi gun-e, 1958, No 1, 33.

Abstract: See RZhKhim, 1958, 49018.

Card 1/1

MOROZOVA, Yu.G., assistant

Machines with circular grids. Izv.vys.ucheb.zav.; mashinostr. no.8:
56-63 '61. (MIRA 15:1)

1. Leningradskiy politekhnicheskii institut.
(Paper-making machinery)

L 06515-67 EXT(m)/EWP(j) RM
ACC NR: AP7000477

SOURCE CODE: UR/0079/66/036/006/1098/1104

MARKOV, S. M., POLEKHIN, A. M., LOSHADKIN, N. A., KOSTENKO, G. A., MOROZOVA,
Z. V., YAKUBOVICH, M. M."Nucleophilic Substitution at the Tetrahedral Phosphorus Atom. II. General
Problems of Kinetics of Alkaline Hydrolysis of Derivatives of Phosphorus
Acids"

Moscow, Zhurnal Obshchey Khimii, Vol 36, No 6, 1966, pp 1098-1104

Abstract: The kinetics of the alkaline hydrolysis of fluorides and nitro-phenyl esters of phosphorus atoms was studied as a function of the pH. A modified Guggenheim method was proposed for calculating the rate constants of first-order reactions. Sample calculations were performed for ethoxymethylfluorophosphonate, butoxymethylfluorophosphonate, and diisopropylfluorophosphonate. The values of E , $\log A$, $\Delta S^\ddagger$, and $\Delta G^\ddagger$ of the alkaline hydrolysis of these phosphorus-containing compounds and the standard deviations of these quantities were calculated by the method of least squares. The temperature dependence of the rate constant was also studied for the alkaline hydrolysis of fluorides and nitrophenyl esters of phosphorus acids; it was found to obey an Arrhenius equation. Orig. art. has: 4 figures, 14 formulas and 3 tables.

[JPRS: 37,023]

ORG: none

TOPIC TAGS: hydrolysis, nonmetallic organic derivative, organic phosphorus compound

Card 1/15 SUB CODE: 07/540M DATE: 05MAR-64 / ORIG REF: 005 / OTH REF: 013 UDC: 546.18.54.63+543.878
0923 1789

3/058/61/000/007/018/086
A001/A101

AUTHORS: Danilova, V.I., Morozova, Yu.P.

TITLE: Effect of substitutes and solvents on electronic spectra of substituted of benzene

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1961, 135, abstract 7V261 ("Dokl. Mezhvuz. nauchn. konferentsii po spektroskopii i spektr. analizu", Tomsk, Tomskiy, un-t, 1960, 89 - 90)

TEXT: The authors had the purpose of revealing general regularities in the action of intra- and intermolecular interactions on the nature and properties of electronic spectra of molecules; with this aim they investigated the effect of substitutes and solvents on electronic absorption bands of a large group of substituted of benzene, aniline, and some other compounds (including di-, and triderivatives). It is shown that introduction into a molecule of a second substitute leads to various changes in spectra depending on its nature. The introduction of a third substitute is accompanied, as a rule, by simplification of the spectrum. Long wavelength band is the most sensitive to intra- and

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Effect of substitutes ...

S/058/61/000/007/018/086
A001/A101

intermolecular interactions. Oscillator strengths were determined for 22 substances in two solvents, and it is shown that a better agreement with the literature data and results of theoretical calculations is observed when internal field in the solution is taken into account by means of models of Lorentz and Onsager.

N. Bakhshiyev

[Abstracter's note: Complete translation]

Card 2/2

33637

S/051/62/012/001/002/020
E202/E492

5.5310 1153, 1282, 1273

AUTHORS: Danilova, V.I., Morozova, Yu.P.

TITLE: Measurement of oscillator strengths for the long-wavelength absorption band of certain substituted benzene derivatives

PERIODICAL: Optika i spektroskopiya, v.12, no.1, 1962, 12-16

TEXT: This work is the continuation of the earlier studies of the authors (Ref.1: Izv. vyssh. uchebn. zaved., fizika, 2, 1958, 108; Ref.2: Izv. vyssh. uchebn. zaved., fizika, 1, 1959, 77; Ref.3: Trans. High Schools Conf. on Spectroscopy and Spectra Analysis. Tomsk, 88, 1960) in which certain parts of the absorption spectra of mono and disubstituted benzene compounds containing, amongst others, NO₂, OH, NH₂ and COOH groups were interpreted with the help of the "metal model". In the present work, the influence of the solvents, substituents and the effects of interaction on the intensity of the long wavelength band was studied, by carrying out a systematic measurement of the oscillator strengths in 19 compounds using various solvents. The following were studied: phenol (water); aniline (hexane); nitrobenzene (hexane); benzoic acid (water); o-, m- and
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S/051/62/012/001/002/020
E202/E492

Measurement of oscillator ...

n-aminophenol (water); o-, m- and n-aminobenzoic acid (water and dioxan); o-, m- and n-dihydroxybenzene (dioxan), o-, m- and n-nitroaniline (water and hexane); o-, m-nitrophenol (water and hexane) and n-nitrophenol (water). The results of the total absorption and the calculation of oscillator strengths for each substance-solvent combination were given. The oscillator strengths values were quoted with and without the solvent corrections which were applied according to three models. The experimental error in the measurement of the oscillator strengths was of the order of a few percent. It was found that the best agreement with the literature and theoretical data was obtained when the oscillator strengths were evaluated taking into consideration the Lorentz-Onsager field. In the case of nitroanilines, nitrophenols and amino-benzoic acids, changing the solvent from nonpolar to polar caused a 1.5 to 2-fold increase in oscillator strength. This was ascribed to a specific (not the universal) intramolecular interaction between the solvent and the solute. However, where the interaction between the solute molecules themselves was stronger than the solute-solvent interaction, the change of solvent had no effect on the oscillator

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E202/E492

Measurement of oscillator ...

strength. The latter case was exemplified by phenol and o-nitrophenol, where association and hydrogen coupling respectively were the preponderant mechanisms. Generally, the effect of the monosubstituted benzene derivatives in a single type of solvent was to reduce the oscillator strength in the following order: nitrobenzene > aniline > phenol > benzoic acid. The departure of the oscillator strengths values from the theoretical values may serve according to the authors as a qualitative indication of a specific interaction occurring when one solvent is substituted for another. These interactions may be due to the intrinsic nature of the group or to the isomerism or to some coupling effect. Generally, the position of the longwave band is determined in the first place by the direct "field" interaction of the groups while its intensity is chiefly related to the coupling effect. T.P.Kravets, B.S.Neporent and N.G.Bakhshiyev are mentioned in the article in connection with their contributions in this field. Acknowledgments are expressed to I.V.Obreimov for supplying some of the data needed in the tests. There are 3 tables and 13 references: 10 Soviet-bloc and 3 non-Soviet-bloc. The Card 3/4

Measurement of oscillator ...

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S/051/62/012/001/002/020
E202/E492

reference to an English language publication reads as follows:
Ref.9: I. Tanaka, S. Nagakura. J. Chem. Phys., v.24, 1956, 1274.

SUBMITTED: January 10, 1961

Card 4/4

L 2181-66 EWT(m)/EPF(c)/EWP(j)/EWA(c) RM

ACCESSION NR: AR5014387

UR/0058/65/000/004/D023/D023

SOURCE: Ref. zh. Fizika, Abs. 4D166

AUTHOR: Morozova, Yu. P.; Danilova, V. I. 44 55 32 B

TITLE: Investigation of absorption spectra of certain semi-converted benzols

CITED SOURCE: Sb. Spektroskopiya. M., Nauka, 1964, 167-169

TOPIC TAGS: absorption spectrum, organic solvent, solvent action, intramolecular mechanics

TRANSLATION: The following absorption spectra were measured: 2,4-dinitro-(I), 2,5-dinitro-(II), 2,6-dinitro-(III), 2,6-dichlor-(IV), 2,6-dibrom-(V) and 4-nitro-phenol-(VI), in water (VII), alcohol (VIII), hexane (IX) and benzol (X). I-III in non-polar solvents IX, X show bands at 3500 and 2500 Å, close to the nitro-benzol band, and in solvents VII, VIII a supplementary band near 4000 Å appears also. The spectrum change of I upon shifting from solvent VII to VIII is attributed to transformation of I into the quinoid form. It is estimated that up to 95% of I in VII appears in the benzol form, and that in VIII up to 97% in the quinoid form. We note the absence of isomerization in compounds III and IV; that in III is due to the intramolecular N-bond. R. Nurmuchamatov.

Card 1/1 dg

SUB CODE: OC, OP

ENCL: 00

L 33191-66 EWT(1)/EWT(m)/EWP(1) IJP(c) RM
ACC NR: AR6016175 SOURCE CODE: UR/0058/65/000/011/D015/D013

AUTHOR: Danilova, V. I.; Zubkova, L. B.; Morozova, Yu. P.; Promareva, O. A.; Pri-
lezhayeva, N. A.; Terpugova, A. F.; Filippova, L. G. Foronova, R. M.

TITLE: Influence of intra- and intermolecular interaction on the energy levels,
electron spectrum, and color properties of complex molecules

SOURCE: Ref. zh. Fizika, Abs. 11D91

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 327-335

TOPIC TAGS: molecular interaction, complex molecule, electron energy level, electron
spectrum, conjugate bond system, hydrogen bonding

ABSTRACT: The intramolecular interaction (effect of conjugation, external-field in-
teraction between donor-acceptor groups, hydrogen bond, etc.) were investigated for
molecules of di- and polysubstitutes of benzene (for 20 compounds). An interpreta-
tion of the observed phenomena is presented. Similar investigations were made for
the intermolecular interaction in different solvents (for 20 systems) and for
complex formation processes (10 systems). General laws of the influence of the in-
dicated processes on the electron levels are formulated and the changes of the spec-
tra are interpreted. [Translation of abstract]

SUB CODE: 20, 07

Card 1/1 MC

ACC NR: AR6016187 SOURCE CODE: UR/0058/65/000/011/D021/D021

AUTHOR: Danilova, V. I.; Ryzhova, G. L.; Morozova, Yu. P.; Terpugova, A. F.

TITLE: Investigation of long wave absorption bands of certain polysubstituted aromatic nitrocompounds

SOURCE: Ref. zh. Fizika, Abs. 11D153

REF SOURC: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 345-349

TOPIC TAGS: absorption band, aromatic nitro compound, organic solvent, BENZENE

ABSTRACT: The authors investigated the electron structures of absorption of certain polysubstitutes of benzene (para-nitrophenol, 2,4-, 2,5-, and 2,6-dinitrophenols, picric acid, para-nitrosophenol, and 2,4-dinitroaniline) for the purpose of determining the role of the NO₂ group in the origin of long-wave absorption bands. The energy levels of the 2,4- and 2,6-dinitrophenols are calculated by the free-electron method. It is shown that the hydrogen bond between the molecules of the investigated compounds and the molecules of the hydroxyl-containing solvents may lead to the occurrence of a new absorption band, which is missing from non-polar and oxygen-containing solvents. [Translation of abstract]

SUB CODE: 07

Card 1/1

PLOTNIKOV, V.G.; MOROZOVA, Yu.P.

Oscillator forces and the polarization of $n - \pi$ -junctions.
Izv. vys. ucheb. zav.; fiz. 8 no.4:175-176 '65.

(MIRA 18 12)

1. Sibirskiy fiziko-tekhnicheskoy institut imeni V.P. Kuznetsova.
Submitted March 20, 1964.

KUPERMAN, F.M., professor; KOROZOVA, Z.A., aspirant; ROSTOVTSOVA, Z.P.,
kandidat biologicheskikh nauk.

Biological investigation of the growth and development of spring
crops. Nauka i pered. op. v sel'khoz. 7 no.5:30-32 My '57.
(Wheat) (Oats) (Millet) (MLRA 10:6)

KORZOVA, Z.A., Cand Bio Sci—(diss) "Facilitation of ^{development} ~~development~~
under conditions of various ^{illumination modes} ~~light regimes~~." Mos, 1962. 21 p. with 1115
(Mos Order of Lenin and Order of Labor Red Banner State Univ. Leningrad),
100 copies: (NL, 45-52, 145)

- 59 -

MOROZOVA, Z.A.

Effect of different light conditions on organogenesis in
Lutescens 62 spring wheat. Nauch.dokl.vys.shkoly;biol.
nauki no.3:145-149 '58. (MIRA 11:12)

1. Predstavlena kafedroy darvinizma Moskovskogo gosudarstvennogo
universiteta imeni M.V.Lomonosova.
(Wheat) (Plants, Effect of light on)

LUPPOVA, N.N.; MOROZOVA, Z.A.; SEMUSHKINA, T.V.

Malaria in the Chuvash A.S.S.R. during the final stage of its
eradication. Med. paraz. i paraz. bol. 32 no.3:267-270 My-Je'63
(MIRA 17:3)

1. Iz Chuvashskoy respublikanskoy sanitarno-epidemiologicheskoy stantsii (glavnyy vrach K.K. Sidorov).

DVORYANKIN, Fedor Ivanovich; b. 1906, . . . , Fed.

(Marxism; a theory of social evolution based on evolutionary theory and, therefore, sociobiological Marxism; also known as dialectical materialism) and genetic problem solving. (Machin, 1987: 106-107, 110-111)

KNIZNEVA, E. V.

KNIZNEVA, E. V. - "Perennial Leguminous Grasses in Meadow Grass Mixtures (in the non-black soil belt)" All-Union Sci Res Inst of Feed Inst V. I. Illinskiy, Moscow, 1959 (Dissertation for Degree of Candidate of Agricultural Sciences,

SO: Knizhnaya Letopis' No. 26, June 1959, Moscow

MOROZOVA, Z V.

BOGOTAVLENSKAYA, V.M.; MOROZOVA, Z.V.

All-Union conference on tuberculosis. Probl. tub. no.3:78-81
Ky-Je '54. (MLRA 7:11)

(TUBERCULOSIS, prevention and control,
in Russia, conf.)

Translation M-616, 1955

KOROZOVA, Z.V.

All-Union conference on tuberculosis. Sov. med. 18 no.9:44-45 S '54.
(TUBERCULOSIS) (KIRA 7:11)

MOROZOVA, Z.V.

Plenum of the Administration of the All-Union Scientific Medical
Society of Phthisiologists. Probl.tub. 34 no.4:79-80 J1-Ag '56.
(TUBERCULOSIS) (MLR 9:11)

MOROZOVA, Z.V.

Work of the Moscow Medical Society of Phthisiologists from April 15, 1954 to January 1, 1956. Probl.tub. 34 no.5:74-79 S-O '56.

(MIRA 10:11)

1. Uchenyy sekretar' Moskovskogo nauchno-meditsinskogo obshchestva ftiziatrov.

(TUBERCULOSIS)

Ad. G. ...
MOROZOVA, Z.V. (Moskva)

~~Sixth~~ All-Union Congress of Phthisiologists. Klin.med. 35 no.12:
132-139 D '57.

(MIRA 11:2)

(TUBERCULOSIS--CONGRESSES)

MOROZOVA, Z.Ye.

Work of the Moscow Society of Phthisiologists during 1957. Probl.
tub. 36 no.8:107-109 '58. (MIRA 12:8)

1. Sekretar' pravleniya Moskovskogo nauchnogo meditsinskogo
obshchestva ftiziatrov.
(TUBERCULOSIS)

MOROZOVA-TUROVA, L.G.

New subspecies of weasel from Central Asia. Zool.zhmr. 32 no.6:1267-1269
H-D '53. (MIRA 6:12)

1. Zoologicheskiy muzey Moskovskogo gosudarstvennogo universiteta im. M.V.
Lomonosova. (Asia, Central--Weasels) (Weasels--Asia, Central)

KOROZOVA-TUROVA, L.G.

Data on the mammalia of the steppes of the Stavropol' territory. Biml.KOIP
Otd.biol. 58 no.4:3-8 '53. (MLRA 6:11)
(Caucasus, Northern--Mammals) (Mammals--Caucasus, Northern)

MOROZOVA-TUROVA, L.O.

Underground vole and the northern bat in the Byaloveshska Pushcha.
Biol.MOIP. Otd.biol. 59 no.5:93-94 S-O '54. (MLRA 8:1)
(Byaloveshska Pushcha--Field mice) (Byaloveshska Pushcha--
Bats)

MOROZOVA-TUROVA, L.G.

Forest lemmings in Kamchatka. Priroda 45 no.8:116 Ag '56.
(MIRA 9:9)

1. Zoologicheskiy muzey Moskovskogo gosudarstvennogo univer-
siteta imeni M.V. Lomonosova.
(Kamchatka--Lemmings)

DAKHNOV, V.N., doktor geol.-miner. nauk; KHOLIN, A.I., kand. geol.-
miner.nauk; PESTRIKOV, A.S.; GALUZO, Yu.V.; AFRIKYAN, AN.;
YUDKEVICH, R.V.; POPOV, V.K.; POZIN, L.Z.; LARIONOV, V.V.;
VENDEL'SHTEYN, B.Yu.; GORBUNOVA, V.I.; DZYURAK, M.D.; YEVDOKIMOVA,
V.A.; ZHOKHOVA, R.G.; LATYSHEVA, M.G.; MAREN'KO, N.N.; MANCHEVA,
N.V.; ~~MOROZOVICH, Ye.R.~~; OREKHOVSKAYA, Ye.P.; POKLONOV, M.S.;
ROMANOVA, T.F.; SEVOST'YANOV, M.M.; TANASEVICH, N.I.; FARMANOVA,
N.V.; FEDOROVICH, G.P.; SHCHERBININ, V.A.; ELLANSKIY, M.M.;
YANUSH, Ye.F.; YUNGANS, S.M., ved. red.; YAKOVLEVA, Z.I., tekhn.
red.

[Using methods of field geophysics in studying gas-bearing re-
servoirs]Primenenie metodov promyslovoi geofiziki pri izuchenii ga-
zonosnykh kollektorov. Moskva, Gostoptekhizdat, 1962. 279 p.

(MIRA 16:2)

(Gas, Natural--Geology)
(Prospecting--Geophysical methods)

MOROZOVSKAYA, I.S., referent.

New instruments for testing textile fabrics. Tekst. prom. 18 no.1:
38-40 Ja '58. (MIRA 11:2)

(Textile fabrics--Testing)

MOROZOVSKAYA, I.S., kand.tekhn.nauk

Abrasives for testing wear resistance of fabrics. Izv.vys.
ucheb.zav.; tekhn.log.prom. no.3:40-47 '59. (MIRA 12:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut khlopchatobu-
mashnoy promyshlennosti.
(Textile fabrics--Testing) (Abrasives)

MOROZOVSKAYA, I.S., inzh.

Testing fabrics on small-sized str-ps. Tekst. prom. 19 no.5:80-81
My '59. (MIRA 12:10)

(Textile fabrics--Testing)

MOROZOVSKAYA, I.S., kand.tekhn. nauk

Comparison testing of various types of apparatus and establishment of the best method for determining the crease properties of fabrics. Izv.vys.ucheb.zav.;tekh.leg.prom. no.4:53-64 '60. (MIRA 13:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut khlopchatobumazhnoy promyshlennosti. Rekomendovana kafedroy materialovedeniya Kiyevskogo tekhnologicheskogo instituta legkoy promyshlennosti.
(Textile fabrics--Testing)

MOROZOVSKAYA, I.S.

"Micronaire," American apparatus for determining the thickness of
cotton fibers. Izv.vys.ucheb.zav.; tekhn.tekst.prom. no.6:20-25
'60. (MIRA 14:1)

1. Moskovskiy tekstil'nyy institut.
(Cotton--Testing)

MOROZOVSKAYA, I.S.

Efficient methodology of fabric testing for strength. Nauch.-issl.
trudy TSNIKHBI '60 [publ. '62]:242-252.

(MIRA 18:2)

SADYKOVA, F.Kh.; MOROZOVSKAYA, I.S.; SEDOVA, G.V.; TELKOVA, Ye.I.

Optimum size of strips used in determining tearing loads for
textile fabrics. Standartizatsiia 25 no.1:30-33 Ja '61.

(MIRA 14:3)

(Textile fabrics---Testing)

MOROZOVSKAYA, I.S.; SIMELEVA, L.S.

Determining the strength of textile fabrics by means of bands
with reduced dimensions. Standartizatsiia 25 no.10:30-33 G
'61.

(MIRA 14:9)

(Textile fabrics--Testing)

MOROZOVSKAYA, I.S.

Scale factor in fibers. Zav. lab. 27 no.3:336-338 '61. (MIRA 14:3)

1. Tsentral'nyy nauchno-issledovatel'skiy intitut khlopchatobumazhnoy promyshlennosti.

(Textile fibers—Testing)

MOROZOVSKAYA, I.S.

Discussing the methods for the determination of the strength of
textile fabrics at the International Organization for Standardization,
Standartizatsiia 26 no.2:34-37 F '62. (MIRA 15:2)
(Textile fabrics--Standards)

MOROZOVSKAYA, I.S.

Evaluating the crease resistance of textile fabrics. Standartizatsiya 27 no.2:27-30 P '63. (MIRA 16:4)

(Textile fabrics—Testing)

MOROZOVSKAYA, I.S., kand. tekhn. nauk; YAKOSLAVTSEVA, K.V.,
red.; ~~MINIKOVA~~, A.M., red.

[Modern methods and instruments for evaluating the quality
of fabrics] Sovremennyye metody i pribory dlia otsenki ka-
chestva tkanei. Moskva, 1963. 75 p. (MIRA 17:9.

1. Moscow. Tsentral'nyy institut nauchno-tekhnicheskoy in-
formatsii legkoy promyshlennosti.

MOROZOVSKAYA, I.S., dotsent, kand. tekhn. nauk

New apparatus and methods for evaluating the wear resistance
of textile fabrics. Tekst. prom. 24 no.2:75-76 F '64.

(MIRA 17:3)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy
promyshlennosti.

MOROZOVSKAYA, I.S., kand. tekhn. nauk

Conference of the institutions of higher education. Standartizatsiia
29 no.1:60-61 Ja '65. (MIRA 18:4)

MOROZOVSKAYA, I.S. (Moskva)

Aid for students of correspondence courses in the "Study of
textiles used in the manufacture of clothing." Shvein. prom.
no.4:39-41 J1-Ag '65. (MIRA 18:9)

47-6°, identical with XIV. The above procedures were used in the prepn. of the following compds.: 5,6,7,8-tetrahydro-1-naphthyl butyrate, *b_p* 168-9°; 3-butyl-5,6,7,8-tetrahydro-1-naphthol (XV), *m.* 63.5-4° (from EtOH); 6-butyl isomer (XVI) of XV, *m.* 123-3° (from aq. EtOH); anisole of XV, *m.* 131.5-2° (from CCl₄); anisole of XVI, *m.* 139.5-41° (from CCl₄); 2-butyl-5,6,7,8-tetrahydro-1-naphthol (XVII), *m.* 51.5-2.5° (from aq. EtOH), *b_p* 174-5°; 6-butyl isomer of XVII, *b_p* 169-70°; 5,6,7,8-tetrahydro-1-naphthyl caprylate, *b_p* 192-3°; 2-capryl-5,6,7,8-tetrahydro-1-naphthol (XVIII), *m.* 49.5-50.5° (from EtOH) (anisole, *m.* 115.5-16.5° (from petr. ether)); 6-capryl isomer of XVIII, *m.* 108-8.5° (from diethyl ether); 4-capryl isomer of XVIII, *m.* 140-1° (from petr. ether-CCl₄); 2-hexyl-5,6,7,8-tetrahydro-1-naphthol, *b_p* 145-6°, and its 6-hexyl isomer, *b_p* 160-60°. II. Rearrangement of complex 5,6,7,8-tetrahydro-2-naphthol esters. *Ibid.* 18, 319-23 (1942).—The Fries rearrangement in tetrahydrocaphthalenes leads to 2-substitution or to 1-substitution if the 3-position is occupied. 5,6,7,8-Tetrahydro-2-naphthol (30 g.) and 18.7 g. EtCOCl on heating for 4 hrs. gave 35 g. 1,5,6,7,8-tetrahydro-2-naphthyl propionate, *b_p* 160°, which, heated for 4 hrs. with 1.25 mols. AlCl₃ at 120°, gave 45% 3-propionyl-5,6,7,8-tetrahydro-2-naphthol (I), *m.* 58-2° (from MeOH); the reaction may also be effected at room temp. in PhNO₂ overnight with lowered yield; 0.57 g. I, 0.56 g. NH₄OH.HCl, 0.42 g. BaCO₃, and 10 cc. EtOH were heated for 5 hrs. to yield the corresponding anisole, *m.* 124.5-5° (from CCl₄). Reduction of I according to Clemmensen gave the 3-propyl-5,6,7,8-tetrahydro-2-naphthol (II), *b_p* 174-4°. Treatment of II with EtCOCl, as above, gave 3-propyl-5,6,7,8-tetrahydro-1-naphthyl propionate, *b_p* 192°, which, on heating with 2 mols. AlCl₃ for 3 hrs. to 150°, gave 1-propionyl-3-propyl-5,6,7,8-tetrahydro-2-naphthol, *m.* 81-3.5° (from MeOH); Clemmensen reduction yielded 1,3-dipropyl-5,6,7,8-tetrahydro-2-naphthol, *m.* 58-9° (from aq. EtOH), identical with the product from the catalytic reduction of 1-ethyl-3-propyl-5,6,7,8-tetrahydro-2-naphthol.

G. M. Kosolapoff

117 209 100 000000 MOROZOVSKAYA, L. M. PHYSICAL AND PROPERTIES INDEX		100 100 010 000000	
<i>Kinetics of the reaction between allyl chloride and sulfuric acid. I. I. Ioffe and L. M. Morozovskaya (Sci. Research Inst. Org. Intermediates, Dyes, Moscow). J. Phys. Chem. (U.S.S.R.) 21, 345-6 (1947) (in Russian).</i> —The rate v of absorption of gaseous C_3H_5Cl and propylene by 62-85% H_2SO_4 without any stirring or shaking is proportional to the partial pressure of the gas at any given moment; the initial pressure was 80 mm. Hg for C_3H_5Cl and 100 mm. Hg for C_3H_6, the other gas being air. The v for C_3H_6 is 5-8 times that for C_3H_5Cl. When liquid C_3H_5Cl and C_3H_6 are shaken with 76-86% H_2SO_4, the v is independent of the amt. dissolved and increases 3 times when the temp. rises from 25° to 45°. The v of C_3H_6 is 15 times that of C_3H_5Cl. J. J. Bikerman			
010.554 METALLURGICAL LITERATURE CLASSIFICATION			
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11-20-220316A/211

48-4-Hydroxy-3,5-diodophenyl-β-aminopropionic acid.
 N. N. Suvorov, V. G. Avramenko, and L. M. Morozov-
 skaya. U.S.S.R. 104,779, Feb. 25, 1957. Antitubercular
 with malonic acid and NH₄OAc gives β-(4-methoxyphenyl)-
 β-alanine. The latter is demethylated by boiling with HBr
 and the resulting β-(4-hydroxyphenyl)-β-alanine dissolved
 in NH₄OH and iodinated either with an eq. vol. of iodine in
 KI or with a soln. of ICl in HCl. β-(4-Hydroxy-3,5-di-
 iodophenyl)-β-aminopropionic acid under the name of betaxine
 is used for treating thyrotoxicosis. Ed. Hoff

1-100204SKAYA, L.P.

Distr: 4E4j

Synthesis of β -diiodotyrosine. V. M. Roshchikov, N. N. Suvorov, V. G. Avramenko, and L. M. Morozovskaya (Chem. Technol. Inst., Moscow). *Zhur. Obshchei Khim.* 27: 2237-38 (1957).—Refusing 500 g. anisaldehyde, 390 g. $\text{CH}_3(\text{CO}_2\text{H})$, 760 g. NH_4OAc , and 2 l. BuOH 3 hrs. gave a ppt. of β -(4-methoxyphenyl)- β -alanine, 54%, decomp. 223-3°; the filtrate gave 18% 4-methoxycinnamic acid, m. 170°. The amino acid (100 g.) in 700 ml. HBr was refluxed 4 hrs., treated with C and evapd. yielding 150 g. crude β -tyrosine- HBr , which adjusted to pH 5 and cooled gave 87.5% β -tyrosine, $p\text{-HOC}_6\text{H}_4\text{CH}(\text{NH}_2)\text{CH}_2\text{CO}_2\text{H}$, m. 173.5-4.5° (cf. Posner, *C.A.* 6, 1908); the *O,N*-dibenzoyl deriv., m. decomp. 194-4.5°. The amino acid (30 g.) in 18 ml. concd. HCl and 150 ml. H_2O was treated at 60° with 36.6 g. ICl in 20% HCl , stirred 2 hrs. and cooled, yielding β -diiodotyrosine- HCl , which with NaOAc gave after 2 pnts. 88.2% β -diiodotyrosine, decomp. 178-8°; if the iodination is run with I-KI in 12% NH_4OH at 3-5°, the yield is 78.6%. The HCl salt has an indefinite m.p. The amino acid forms a di- $\text{Na-H}_2\text{O}$ salt, $\text{NH}_2\text{H}_2\text{O}$ salt, decomp. 161-2°; the *N*-benzoyl deriv., decomp. 206.5-207°, the *N*-Ac deriv. (decomp. 210-19.5°) treated with SOCl_2 and EtOH gave the *N*-acetyl- β -diiodotyrosine Et ester, m. 125-6°. The bromed 3,5,4-($\text{HO})\text{C}_6\text{H}_2\text{CH}(\text{NH}_2)\text{CH}_2\text{CO}_2\text{H}$ is an active antithyroidal substance and has been released for use as Batuzine (L. M. Roshchikov).

SUVOROV, N.N.; SOKOLOVA, L.V.; MOROZOVSAYA, L.M.; MURASHEVA, V.S.

Synthesis of progesterone from solasodin. Khim. nauka i prom. 3
no.2:281-282 '58. (MIRA 11:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S. Ordzhonikidze.
(Progesterone) (Solasodine)

SUVOROV, M.N.; YAROSLAVTSEVA, Z.A.; SOKOLOVA, L.V.; MOROZOVSKAYA, L.H.;
OVCHINNIKOVA, Zh.D.; MURASHEVA, V.S.; MEYREL'MAN, F.Ye.; VOROB'YEV, M.A.

Synthesis of cortisone from solasodine. Med.prom. 12 no.2:7-11 P '58.
(MIRA 11:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S.Ordzhonikidze.
(SOLASODINE) (CORTISONE)

AUTHORS: Suvorov, N. N., Dudinskaya, A. A., 79-28-5-60/69
Morozovskaya, L. M.

TITLE: Hormones of the Thyroid and Their Homologs
 (Gormony shchitovidnoy zhelezy i ikh gomologi).
 III. Synthesis of the Amine Analogs of Betasine
 (III. Sintez aminoanalogov betazina)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 5,
 pp. 1374-1378 (USSR)

ABSTRACT: In continuation of the compounds synthesized by the
 authors for the purpose of investigating their antithyroidal
 effect in dependence on their chemical structure (reference 2), they used the N-acetyl- β -4-nitrophenyl- β -alanine
 (I) - synthesized already earlier by them - which through
 the skeleton nickel catalyst was hydrated to β -4-ami-
 nophenol- β -N-acetylamino-propionic acid (II) as initial
 product for the synthesis of the 4-amino analog of beta-
 sine. This acid was saponified and the obtained unseparated
 β -4-aminophenyl- β -alanine (III) was isolated in
 pure state in diluted hydrochloric acid with monochloro-

Card 1/3

Hormones of the Thyroid and Their Homologs.
III. Synthesis of the Amine Analogs of Betasine

79-28-5-60/69

iodide, which lead to the necessary β -(amino-3,5-diiodophenyl)- β -alanine (IV) (see scheme 1). The easily accessible β -3-nitrophenyl- β -alanine (V) was hydrated on the above catalyst for the synthesis of β -(3-amino-4,6-diiodophenyl)- β -alanine (VII), and the obtained β -3-aminophenyl- β -alanine (VI) was iodated with monochloriodide. For experimental reasons the structure (VII) and not that of (VIII) or (IX) was attributed to the iodization product. The final proof for compound (VII) was supplied the following way: The aromatic amino group was substituted by iodine through the diazocompound and the obtained triiodaminic acid (X) was oxidized with potassium permanganate with the formation of triiodobenzoic acid (melting point 247-248°C). This proved to be identical with the 2,4,5-triiodobenzoic acid (XI) by Wheeler & Johns (Uiller i Dzhons) which was proved by direct comparison with the acid itself as well as of the ethylesters obtained by the authors. The results of the physiological activity of the synthesized compounds will be given at a later time.

There are 5 references, 3 of which are Soviet.

Card 2/3

Hormones of the Thyroid and Their Homologs.
III. Synthesis of the Amine Analogs of Betasine

79-28-5-60/69

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze (All-Union Scientific Chemical and Pharmaceutical Research Institute imeni S. Ordzhonikidze)

SUBMITTED: April 13, 1957

Card 3/3

SUVOROV, N.M.; MOROZOVSKAYA, L.M.; DUDINSKAYA, A.A.

Hormones of the thyroid gland and their analogs. Part 4: Synthesis of desamino analogs of betazine. Zhur.ob.khim. 28 no.9:2601-2603 S '58. (MIRA 11:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(Tyrosine)

SOV/79-29-1-69/74

AUTHORS: Suvorov, N. N., Sokolova, L. V., Morozovskaya, L. M.,
Murasheva, V. S.

TITLE: Steroids (Steroidy). II. Synthesis of Progesterone From
Solasodine (II. Sintez progesterona iz solasodina)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 329-332 (USSR)

ABSTRACT: The present paper gives experimental data concerning the trans-
formation of solasodine into the hormone progesterone.
Solasodine (I) is, as we know, an aglucone of the steroid
glucoalkaloids separated from Solanum aviculare Forst. This
plant was cultivated in the USSR. A. S. Labenskiy synthesized
solasodine. The synthesis of progesterone from solasodine has
hitherto not been described. In reference 2 it was only noted
that in the case of heating solasodine (I) with acetic acid
anhydride in connection with further oxidation and saponifica-
tion of the reaction products a semi-crystalline product re-
sults which was chromatographed, acetylated and separated after
further treatment as the acetate of $\Delta^{5,16}$ -pregnadienol- 3β -on-
20 (IV) and 3β -acetoxy-16-methoxy-20-keto- Δ^5 -pregnene beside

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SOV/79-29-1-69/74

Steroids. II. Synthesis of Progesterone From Solasodine

other not identified by-products. No details as to reaction conditions and yield were given. It must be emphasized that the transformation of (I) into (IV) can take place in three stages without by-products, however, the exact reaction procedure has hitherto not been found. In contrast with the acetate of the structurally close diosgenine in the case of heating solasodine with acetic acid anhydride the result is not compound (IV) but a completely resinified product. It was found that the oxidizing separation of the double bond (II) $\rightarrow$ (III) takes place most favorably by oxidation with $\text{Na}_2\text{Cr}_2\text{O}_7$ in acetic acid at room temperature. It is possible to carry out the separation of the side chain under formation of the $\Delta^{16(17)}$ double bond (III) $\rightarrow$ (IV) in an alkali as well as in an acid medium. In the case of an acid medium the reaction of solasodine into the final product (IV) occurs very smoothly. The yield in the latter amounted to 44% as calculated for (I). This compound is not only the initial product for the synthesis of progesterone and cortisone but also of other steroid hormones (Refs 6-8). The further transformation of (IV) into progesterone was carried

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SOV/79-29-1-69/74

Steroids. II. Synthesis of Progesterone From Solasodine

out according to Butenandt, Schmidt-Thomé, Oppenauer
(Refs 9,10). There are 13 references, 4 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevti-
cheskiy institut imeni S. Ordzhonikidze (All-Union Scientific
Chemo-Pharmaceutical Research Institute imeni
S. Ordzhonikidze)

SUBMITTED: November 1, 1957

Card 3/3

SUVOROV, N.N.; MOROZOVSKAYA, L.M.; LEYBEL'MAN, F.Ya.; YERSHOVA, L.I.

Improved method of obtaining progesterone and oxime of $\Delta^5, 16$ -pregnadien-3 β -ol-20-one acetate from solasodine. Med. prom. 14
no. 7:31-33 Je '60. (MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S. Ordzhonikidze.
(PROGESTERONE) (OXIMES)

SUVOROV, N.M.; MOROZOVSKAYA, L.M.

Steroids. Part 7: Mechanism of the conversion of solasodine
into 3β -hydroxy- $\Delta^{5,16}$ -pregnadien-20-one. Zhur.ob.khim. 30
no.6:2062-2067 Je '60. (MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevti-
cheskiy institut imeni S. Ordzhonikidze.
(Solasodine) (Pregnadienone)

ZHEREBCHENKO, P.G.; SUVOROV, N.N.; SHASHKOV, V.S.; YARMONENKO, S.P.;
MOROZOVSKAYA, L.M.

Mechanism of the radioprotective action of 5-hydroxytryptophan.
Radiobiologiya 1 no.5:789-791 '61. (MIRA 14:11)
(RADIATION PROTECTION) (TRYPTOPHAN)

RAUSHENBAKH, M. O., prof.; ZHAROVA, Ye. I.; IVANOVA, V. D.; NEMENOVA, N. M.,
prof.; PROTASOVA, T. G.; MOROZOVSKAYA, L. M.

Leukemogenic and blastogenic properties of some tryptophan
metabolites. Probl. gemat. i perel. krovi no.10:3-8 '61.

(MIRA 14:12)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i pereli-
vaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A. A.
Bagdasarov [deceased]).

(TRYPTOPHAN) (METABOLISM, DISORDERS OF)

CHERNOV, G.A.; MOROZOVSKAYA, L.M.

Mechanism of serotonin metabolism disorders in acute radiation sickness. Med.rad. no.10:59-62 '61. (MIRA 14:10)

1. Iz radiobiologicheskoy laboratorii (zav. - prof. M.O. Raushenbakh) Tsentral'nogo ordena Lenina instituta gematologii i pereli-vaniya krovi i laboratorii sinteza kortizona Vsesoyuznogo nauchno-issledovatel'skogo khimiko-farmatsevticheskogo instituta imeni S. Ordzhonikidze.

(RADIATION SICKNESS)

(SEROTONIN)

SUVOROV, N.N.; MOROZOVSKAYA, L.M.; SOROKINA, G.M.

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(MIRA 14:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Orizhonikidze.
(Tryptophan)

MOROZOVSKAYA, L.M.; YERSHOVA, L.I.; SUBOROV, N.N.

Synthesis of L-3,5,3'-triiodthyronine. Med. prom. 16 no.1:10-16
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1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevtichskiy
institut imeni Ordzhonikidze.
(THYRONINE)

SUVOROV, N.N.; MOROZOVSKAYA, L.M.; YERSHOVA, L.I.

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(MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy
institut imeni S. Ordzhonikidze.
(Tryptophan)

SUVOROV, N.N.; KLIMOVA, L.I.; MOROZOVSKAYA, L.M.

Steroids. Part 19: Beckmann rearrangement of the oxime of
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acetate. Zhur.ob.khim. 32 no.10:3308-3315 0 '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-
farmatsevticheskiy institut imeni S. Ordzhonikidze i
Institut khimii prirodnkh soyedineniy AN SSSR.
(Steroids) (Pregnenone)
(Beckmann rearrangement)

OVCHINNIKOV, K.M.; MOROZOVSKAYA, M.I.; TISHCHENKO, O.D.; DEMCHENKO, I.A., direktor;
 NADTOCHIY, S.S.; GORELYSHEVA, I.I.; BEL'SKAYA, M.K.; KONTOROVSKAYA, T.M.;
 BELYI, Ya.M., zaveduyushchiy; DEREVENKO, V.I.; SHEVCHUK, M.K., zaveduyushchiy;
 D'YACHENKO, V.I.; SAKOVICH, V.K.; AGAFONOV, I.N., zaveduyushchiy; BEZVAMIL'-
 NAYA, P.S.

Prognosis of malarial incidence of a locality and organization of antimalarial measures in the zone of the future Kakhovka reservoir. Med.paraz. i parazitolog. no.2:109-116 Kr-4p '53. (MLRA 6:6)

1. Ukrainskiy institut malyarii i meditsinskoy parazitologii imeni profesora Rubashkina (for Demchenko). 2. Zaporozhskaya oblastnaya protivomalyariynaya stantsiya (for Belyi). 3. Dnepropetrovskaya oblastnaya protivomalyariynaya stantsiya (for Shevchuk). 4. Khersonskaya oblastnaya protivomalyariynaya stantsiya (for Agafonov).

(Kakhovka reservoir region--Malarial fever)
 (Malarial fever--Kakhovka reservoir region)